The World At Our Doorstep: How Globalization is Shaping the Future of Business

A Special Report from BioResource International, Inc

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WHY GLOBALIZATION MATTERS

The term “globalization” evokes multiple definitions and opinions. For our purposes as we discuss globalization, we will use the definition that the International Monetary Fund uses for “economic globalization.”

“Economic ‘globalization’ is a historical process, the result of human innovation and technological progress. It refers to the increasing integration of economies around the world, particularly through the movement of goods, services, and capital across borders. The term sometimes also refers to the movement of people (labor) and knowledge (technology) across international borders. There are also broader cultural, political, and environmental dimensions of globalization.”

Globalization suggests that information, knowledge and opportunity are decentralized and shared, such that people who once did not have access to each other now do. Thomas Friedman states it this way:

“[T]he inexorable integration of markets, nation-states, and technologies to a degree never witnessed before—in a way that is enabling individuals, corporations and nation-states to reach around the world farther, faster, deeper and cheaper than ever before…the spread of free-market capitalism to virtually every country in the world.” (Friedman, The Lexus and the Olive Tree, 1999, p. 7-8).

As the marketplace expands, resources and opportunities grow as well. This results in more labor competitiveness and production efficiency. It also increases potential markets for customers and economic gains. Ideally, as globalization accelerates there will be increased opportunities for collaboration between nations, multinational corporations and communities. As new products and services, as well as additional capital are integrated into the social fabric of communities, those communities benefit from the development of better educational and healthcare systems, among other things.

When we first started BioResource International, Inc. in 1999, we intentionally included “international” in the name, with just a vague notion that there would be some sort of international aspect to our business. Fast forward 13 years later and we see “fingerprints” of globalization all over BRI—we have venture investors from Asia, Taiwanese suppliers and a logistics office there. And through our partnership with Novus International,
we are starting to see sales growth of Versazyme and Valkerase all over the world. We joke that wherever they grow chickens, that is where BRI wants to be. And since poultry production is a global business, our business has taken us all over the world, from Lima, Peru to Beijing, China and many places in between. So in the next few pages, we hope to shed some light on this multi-faceted topic and offer some of our personal insights on how globalization has impacted us and how it might impact you as well, if it hasn’t already.

**Who is Emerging?**

In 1981, Antoine W. Van Agtmael, while on the World Bank’s International Finance Corporation, coined the term “emerging market economy.” In 2007, he argued that the “world’s center of gravity is already decisively tipping in favor of the emerging economies,” creating “new opportunities for those who are alert to them.” These words have become quite prescient, as the “developed economies” of the US and Europe have recently slowed since the financial crisis of 2008, while many of the emerging economies have continued to maintain almost double digit GDP growth in that same period. So, what describes an emerging market, and which countries constitute the leading emerging markets?

According to [Investing Answers](https://www.investinganswers.com) “an emerging market economy describes a nation’s economy that is progressing toward becoming more advanced, usually by means of rapid growth and industrialization. These countries experience an expanding role both in the world economy and on the political frontier. Emerging markets have lower per-capita incomes, above-average sociopolitical instability, higher unemployment, and lower levels of business or industrial activity relative to the United States; however, they also typically have much higher economic growth rates.” Previous examples of emerging market countries are former Soviet Union countries, as well as other Eastern bloc nations.

In 2001 economist Jim O’Neill of Goldman Sachs coined the term “BRIC” to describe the emerging economies in Brazil, Russia, India and China. In 2011, the [World Bank](http://www.worldbank.org) stated that **BRIC** countries will lead the world’s economy with more than a half of all global growth by 2025. (China and India are considered the largest of the BRIC economies and will be the focus of upcoming blog posts in this series).

As emerging markets grow, their increasing appetite for food and natural resources also grows, which creates new markets for companies in established economies like the United States. At BRI, we have embraced the opportunities created in emerging markets around the world as they seek innovative ways to meet their global food production demands.
GLOBAL TRIBES
AND ENTREPRENEURSHIP

In the summer of 1969, a young Chinese graduate student with a penchant for the music of Elvis Presley and the Beatles left his homeland of Taiwan and flew halfway across the world to America to pursue his Ph.D. degree at Cornell University. Soon after, his wife and two-year-old son came to join him in this new land. Fast forward 30 years later, that young student was a tenured professor at North Carolina State University and decided to launch a start-up biotechnology company with his son to commercialize some of his pioneering work on enzymes. That young student was my Father and that two-year-old son, me, Co-founder and now CEO of BRI. I’m sure our story is not unlike many other immigrant family’s story – coming to the US on nothing more than a hope for better education and greater opportunities.

The US has always been a nation of immigrants and through the generations, these waves of immigration have impacted all aspects of American society, from politics to economics to language and culture. One need not venture any further than New York City’s Chinatown or Little Italy neighborhoods to see the impact early immigrants have had on that city and the culture. There are other examples of this around the country, from large ethnic and immigrant communities in urban areas, to smaller communities in suburban areas.

Robin Cohen, in the second edition of his book *Global Diasporas*, lists several mutual characteristics of diaspora. We highlight four of these that most apply to the global market:

1) Those who have left a homeland in search of work, in pursuit of trade.
2) Those possessing a collective memory and myth about the homeland.
3) Those with a strong ethnic group consciousness sustained over a long time.
4) Those with a sense of solidarity with co-ethnic members in other countries.

Immigration and entrepreneurship are connecting the global economy and emerging economic markets. In light of those identifying with a diaspora, it is a matter of maintaining ties to a home country and identity, balancing that with conducting business in more traditionally established economies. In his 1994 book, *Tribes*, Joel Kotkin
asserts that ethnic identity and connectedness is a critical player in the global economy. More recently Kotkin has published a paper, *The New World Order*, in which he looks at the world through a cultural lens. His primary point is that diaspora remain together in the global economy through a feeling of belonging or togetherness. This goes beyond cultural awareness to ties that create trust faster and make communication easier. Simply stated – we gravitate towards people like us and we care about the culture we identify with most.

So what about that start-up company that my immigrant Father and I started? We are doing pretty well, slow economy notwithstanding, because of those “global diaspora” links. It was those links that allowed us to raise capital from similarly minded investors who related to our immigrant “by the bootstraps” story; those links that got us in front of institutional investors in Asia; those links that subsequently helped find our Taiwan suppliers when we needed to scale up production. The old adage in business being about “who you know” not “what you know” holds true - and in this age of global entrepreneurship, I believe we will see global “tribes” continuing to drive business even more so than country or geographic affiliations.

Next, we explore two countries, China and India, which have been particularly successful in leveraging global tribes and global trends.

**I. China and Globalization**

In a *2003 speech*, Chinese Ambassador to the UK Zha Peixin said, “For China, globalization is often seen as a double-edged sword that brings both opportunities and challenges, advantages and disadvantages.” Perhaps nothing illustrates the challenges and opportunities China currently faces in the age of globalization like the recent issues surrounding Foxconn, China-based contract manufacturer for many of Apple’s iPhone products, and actor Mike Daisey’s controversial one-man show, *The Agony and Ecstasy of Steve Jobs*. Despite its inaccuracies, Daisey’s show has surfaced many of the issues surrounding Chinese labor practices and the lengths China’s manufacturers will go to meet the global demand for their products.

China has a development process that is providing advantages to its economy and its place in the global market. While the US economy has expanded by tenths of one percent during the recent economic crisis, China has seen its economy expand by over 10% each year in that same time period (recent reports estimate growth to slow to 8% in 2012). There are multiple reasons and theories for why this is the case, and *Barry Naughton*, professor of International Affairs at the University of California, San Diego, in his seminal text, The Chinese Economy, points...
to three important aspects on why the country’s development process is different:

1) China invests more than other economies.
2) China concentrates more on manufacturing than other economies.
3) China has grown more rapidly than other economies.

China’s economic growth does present challenges and opportunities both within and outside of its borders, but as it has recently surpassed Japan as the world’s second largest economy (second only to the United States), one cannot ignore or be threatened by this emerging economic superpower. Rather, it is imperative that those outside of China continue to engage with this vast country and move forward together.

BRI’s co-founders, management team and business partners have been engaging with Chinese scientists, officials and/or business leaders in some form or fashion since the 1980’s, building bridges between our two countries. It has not always been easy or straightforward, but it is those early and continual investments in building relationships with the Chinese that will pay off in the long run.

I am reminded of a sign I saw during one of my first trips to Beijing, China. As I rode down the escalator at Beijing International Airport to claim my luggage, I saw a sign in Chinese and below its approximate English translation “Be Careful.” While the message was more geared toward reminding tourists to be mindful of their own safety, I read it also as a warning to business leaders to be mindful of the risks and benefits as they enter into China.

II. India and Globalization

India is another emerging country with tremendous growth. A quick glance at India’s businesses would indicate that its primary contributions to the global economy are cars, steel, call centers and Bollywood. However that would be a superficial assessment of the country’s contributions and future impact. Since 1991, when India opened up its economy, investments from foreign companies have flowed in and aided the building of its ailing infrastructure. Now, after years of growth, India now stands as one of the fastest growing global economies, second only to China.

According to Chandrasekaran Balakrishnan, the 2004 Moffatt Prize in Economics winner: “India has to concentrate on five important areas or things to follow to achieve this goal: technological entrepreneurship, new business openings for small and medium enterprises, importance of quality management,
prospects in rural areas and privatization of financial institutions…”

“There will be new prospects in rural India. The growth of the Indian economy very much depends upon rural participation in the global race. After implementing the new economic policy the role of villages got its own significance because of its unique outlook and branding methods. For example food processing and packaging are one of the areas where new entrepreneurs can enter into a big way. It may be organized in a collective way with the help of co-operatives to meet the global demand.”

In his book, The Fortune at the Bottom of the Pyramid, author C.K. Prahalad examines how companies that innovate products and services targeting the world’s poorest populations can find economic gains. He indicates that companies in China and India are doing this better than others. The premise in his book is that companies that innovate products and services targeting the world’s poorest populations can find economic gains. He offers some examples:

1) India’s Hindustan Lever invented a low-cost water purifier for India’s rural population.
2) Godrej’s refrigerator for $60 targeting people living in villages. The low-cost refrigerator keeps the water and vegetables cool but does not produce ice, which is not important for the rural population.
3) Airtel created a business model to produce cheap wireless minutes for the growing Indian population and became the largest telecom provider in India.
4) China’s Haier invented a washing machine for rural customers that is capable of washing both clothes and potatoes. Haier also invented a rodent-proof refrigerator that keeps food rodent-free for their rural customers.

By combining innovation, technology and products aimed at fighting poverty in the world, countries like China and India are taking advantage of new economic opportunities that can be mutually beneficial to the consumer and the company.
LIVING IN A POST-AMERICAN WORLD

Just as the writer Mark Twain once famously quipped, “The rumors of my death have been greatly exaggerated,” the rumors of the demise of American supremacy have been greatly exaggerated. In his book, The Post-American World, journalist Fareed Zakaria argues that while the living standards and incomes of other countries outside the US continue to rise, America still plays a vital role in the changing global landscape.

In a recent Commencement address at Duke University, Zakaria observed that in 1979, only 30 countries were growing at greater than 3% annually; contrast that with today, where even after the global recession, over 90 countries have annual growth rates greater than 3%. Some countries which had never been part of the global economy are now growing faster than many of their developed world counterparts and are flexing their economic muscles.

But rather than “the rise of the rest” diminishing the role of America, Zakaria extols Americans to adapt to the new dynamics of an increasingly global economy and embrace the emergence of other countries and their economies.

There are a number of trends and characteristics in this “post-American world”:

1. Continued growth of emerging markets (China, India, Brazil, Turkey, Russia).
2. American recognition of its own capability for energy production.
3. American policy goals that focus on greater openness and collaboration.
4. America seeking greater diversity for responses to global crises.
5. American business interests growing in emerging market economies.

So with these points in mind, is there opportunity for small and medium-sized businesses in America to learn and to thrive in the post-American world? In the next four sections, we examine the strengths, weaknesses, opportunities and threats for American business and reflect on its place in the new global economy.
I. 4 Reasons Why the U.S. is Still the Place to be for Technology

Facebook. Apple. Amazon. Google. These high-growth technology companies all have one thing in common – they all started in the US and were nurtured here. Arguably, none of these companies could have been so successful so quickly if they were based outside the US. While there are a number of factors that make starting and growing a business feasible, there are some specific factors that make the US uniquely suited for innovative companies like the ones mentioned here. In this, our first installment of a four part series examining the strengths, weaknesses, opportunities and threats (SWOT) in a post-American world, we will be highlighting the strengths of starting a business in the United States.

The diversity of this country has helped make the US a great country in which to live and do business. It is that diversity and dynamism that attracts others to come to our shores and puts the US at the crossroads of the best ideas and insights from all over the world. Combine that dynamism with the freedoms granted for individuals to follow their passions with limited governmental interference, and voila, you create the ideal environment for knowledge-driven industries such as information technology and biotechnology to blossom.

There are many reasons why technology-driven companies flourish in the US. Listed below four that stand out when compared to other countries:

1) Educated workforce
The American university system, through focus on research, scholarship and innovation, provides a creative and educated workforce on which to build and expand knowledge-driven businesses.

2) Respect for intellectual property
This simple protection ensures that those who make the inventions and innovations, no matter how small or how big, are protected through trademarks, copyrights, patents and trade secrets.

3) Government stability
The stability of governmental systems is directly proportional to long term business investment and growth because businesses thrive in stable political and social environments.
4) Contract law
Compliance with contract law provides additional protection for businesses and employees, assuring fairness for service rendered and partnerships created.

Indeed, it is because of many of these factors, among others, that have helped BRI reach some level of success in our relatively short history. We hire well-qualified graduates from the many quality universities across the country. We have a patent portfolio that allowed BRI to carve out a nice niche for ourselves in the market. And we are thankful every day that our legal contracts hold all parties accountable and create long-term trust. We are also thankful that the government is more or less stable and so we can focus on growing our businesses and not worry about politics.

II. 4 Areas of Improvement for U.S. Business to Consider

While there are many advantages for starting a business in the United States, there are also reasons for caution. In the previous post we examined advantages why the US is still the place to be for high growth technology-based businesses. In this, our second installment of a four part series examining the strengths, weaknesses, opportunities and threats (SWOT) for a post-American world, we will be exploring the potential weaknesses of starting and growing a business in the United States.

Here, in no particular order, are our 4 areas of improvement for American businesses to consider:

1) Limited Perspective
For many businesses, small or large, the common misperception is that the US market is big enough such that there is no need to expand into global markets. Certainly the US has the world’s largest and most dynamic economy, but that does not mean it is the only market in which a small business could be successful. With the recent downturn in the US economy, many business owners have started to look beyond the borders for market opportunities, for example in the emerging economies of Brazil, India and China.

2) Regulatory Barriers
There is no doubt that regulations and legal protections are critical for long term sustainability of an economy, and the protection of property rights create opportunities for companies to compete and thrive. However, an
overabundance of regulation or inefficient regulatory agencies has the potential to impede innovation. For example, it took BRI eight years to get a patent approved by the US Patent and Trademark office. While that is on the high side, the length of time for US patent approvals is closer to three years and the duration appears to be lengthening due to an overburdened and under-resourced patent office.

3) Human Capital
Our previous post stressed the availability of an educated workforce as a driver for technology-based companies to thrive in the US. The flip-side of this equation is that the pool of educated workers who come to the US from overseas to study at our top-ranked educational institutions, especially those in the STEM (Science, Technology, Engineering and Mathematics) fields, have an increasing array of opportunities to choose from upon graduation, whether working in their native countries or in other countries. The US must recruit and retain the best and the brightest workers to be successful in the new global economy.

4) Manufacturing Base
It is a natural progression of an economy that as it develops, it moves from producing goods to providing services. It is also widely known that the resilience of an economy comes from the diversity of its businesses. A big gap in the US economy is the erosion over the last few decades of US-based manufacturing businesses as lower cost countries like China and India have become more competitive. In recent years, however, due to higher productivity in the US and rising labor costs in China, some of that manufacturing has been coming back to the US in the form of “on-shoring.” High end manufacturing, such as bio-manufacturing or rapid prototyping, could be the chance for the US to regain some of our former leadership in manufacturing.

Despite the challenges, we at BRI remain optimistic in the long run about the future of US businesses in this post-American world. It is likely that the companies that will be successful in the future are those who can dynamically adapt, combine and manage the best elements of their worlds, whether it be technology and business, or East and West, or old and new.
III. Opportunities

Prior posts have addressed the 4 strengths of starting and growing technology-driven businesses in the US and the 4 areas the US could improve upon in order to move ahead in the new global economy. In this, the third part of our series examining the strengths, weaknesses, opportunities and threats (SWOT) for a post-American world, we look at opportunities. We outline 4 areas of opportunity for US companies to consider in a post-American world.

Agriculture
The US has been blessed with the abundance of agricultural products such as corn and soybeans for the last several decades. As a result, one of the major exports to feed an ever-growing world population will continue to be high quality US agricultural products. But in addition to exporting grains, there is a long history of exporting US agriculture tools and techniques also, ranging from the latest John Deere tractors to the latest hybrid corn seeds from Monsanto.

Infrastructure
As any recent visitor to China or India can tell you, the major cities there are undergoing a construction boom as the BRIC and other emerging countries build new buildings, bridges and roads as well as repair their aging infrastructure. American companies that are actively engaged in those projects include US industrial companies like Caterpillar, 3M and General Electric.

Energy
The post-American world will continue to consume increasing amounts of energy as energy demand from emerging countries competes with demand from developed economies for a limited supply of energy resources. American energy companies like Conoco Philips and Exxon Mobil will need to lead the way to new energy sources, whether they are derived from hydraulic fracturing (“fracking”) or alternative energy sources such as wind, solar and biofuels.

Innovation
As mentioned in prior articles, the US still leads the way in the quantity and quality of innovative companies, from Apple to Intel, from Google to Biogen Idec. That will continue to be the case for at least the next several years, and will create global opportunities which will change the world.
If it seems that all these opportunities favor large Fortune 500 companies, keep in mind that a new company that has yet to be created could enter the scene in the next few years and take significant market share with a completely new business model. One need look no further than the recent case of Facebook that in less than ten years created a company with nearly twice the market capitalization as Ford Motor Company. The opportunities are unlimited for those who see them and take advantage.

IV. Threats

The threats to U.S. businesses today are bigger and far more complex than they were in the 1980s, when the U.S. was in fierce competition with Japan. Now it is no longer Japan, but many emerging countries that are developing strengths and capabilities in areas such as technology, manufacturing and financials, which have been at the heart of the U.S.’s dominance in the past.

Previous articles have addressed the strengths, weaknesses, and opportunities of starting and growing technology-driven businesses in the U.S. In the fourth and final part of this series, we examine the threats. What are the threats that U.S. businesses face in the post-American world?

Corporate Taxes
The U.S. has one of the highest corporate tax rates in the world at 35%, not counting discounts and write-offs. By comparison, the corporate tax rate in Brazil and China is only 25% without exclusions. The ease with which businesses can move at least some of their activities from country to country has made investment decisions more sensitive to differences in tax rates. As profit margins continue to shrink in the U.S., differential tax rates will drive more companies toward moving some operations overseas as a cost-saving measure.

Healthcare Costs
The World Economic Forum’s Global Competitiveness Report for 2011–2012 states that except for the U.S., every one of the top 10 competitive nations in the world have implemented universal health care programs. Yet the U.S. spends more than 17% of its GDP on health care, higher than any other developed nation. Furthermore, employer-funded coverage is the backbone of the U.S. health insurance system. Health care is the most expensive benefit that many U.S. employers pay, which puts them at a substantial competitive disadvantage in the global marketplace.
Reverse Brain Drain

For the better part of the last century, thousands of highly-skilled immigrants came to the U.S. to study, and then stayed on to work for or establish companies that contributed to the nation’s bottom line. Now, rising economic opportunities, lower operations costs, and access to local markets are compelling today’s foreign-born graduates to return to their home countries. And even for those who choose to stay, the U.S.’s immigration policy is an obstacle. For example, according to the National Foundation for American Policy, the wait time for permanent resident status in the US for educated workers is 5 years or more.

Flat World

Advances in networking and information technologies have ensured that a U.S. business’s competitors could be anywhere in the world, with access to the same pool of resources and expertise. As a result, clients now have a wider range of options to choose from, many of which come at a lower cost that what U.S. businesses can offer. In 2004, a report published by the Urban Land Institute and the Columbia Business School’s Paul Milstein Center for Real Estate predicted a cumulative loss of another 3.3 million knowledge-based jobs in the U.S. by 2015.

The good news is that while there are threats in every market, they also present potential opportunities. In the case of the global marketplace, U.S. businesses can pursue collaborations with foreign-born, U.S.-educated professionals who are now sowing American knowledge and skills abroad. Indeed, the business and educational contacts that these professionals have made during their stay in the U.S. can spark more cross-continental collaborations and parallel growth.

If businesses like BRI are to be successful, it is critical that we not only work through these threats, but recognize and take advantage of the associated opportunities. At BRI, we do this by being diligent in our market and scientific research, establishing mutually-beneficial relationships with partners in emerging markets, and actively monitoring needs within the global food production chain that we could help address.
V. Doing Business In A Flattened World

We started this report on globalization with the goal of shedding light on the topic, as well as offering insights on its impact on our business and how it could impact your business as well. We have discussed what globalization means and why it matters to businesses, described the characteristics of emerging market economies and discussed the strengths, weaknesses, opportunities, and threats that U.S. businesses will need to manage in this Post-American World.

So as we wrap up the series, we want to explore what lies ahead for the global markets. Are the BRIC’s facing a “BRIC” wall? Which countries, if any, are likely to be the next Brazil, Russia, India or China?

In his book, Breakout Nations, Ruchir Sharma gives a quick overview of more than two dozen of what could be the world’s most interesting economies in the coming decade. Sharma, who is head of Emerging Market Equities at Morgan Stanley, referred to South Korea and Taiwan as the “the gold medalists of global competition,” because their economies continued to grow at a rapid pace even after they became wealthy, when expansion became much more difficult. He also forecasted that the Czech Republic, South Korea, Turkey, as well as Poland, Indonesia, and Turkey could be the next phase of emerging market candidates attracting investment dollars.

In an interview with CNN’s Fareed Zakaria, he laid out three factors why the U.S.’s potential for growth remains high in the global market: the U.S. dollar exchange rate, the closing of the wage growth differential, and the incredible rate of technological innovation in America. According to Sharma, the U.S. dollar today, even after it has been adjusted for all inflation against its trade-weighted partners, is the most competitive that it’s ever been. This means that products sold by American manufacturers and exporters will be cheaper, which gives them a big advantage. And while Americans’ wages are still much higher compared to workers in emerging markets, the difference is becoming smaller.

Meanwhile, the lead that the U.S. has over other countries with regard to technological innovation is getting even bigger and more significant. Even though the factories are overseas, most of product design and development still takes place in America. “[Technology] is what makes many emerging markets remain only emerging,” said Sharma.
In spite of these advantages, however, U.S. companies will have to adopt a global view as they grow in order to be successful. As mentioned in a previous blog post, we intentionally included “international” in the name when we first started BioResource International 13 years ago, in anticipation that there will eventually be an international component to our business. We are now here. BRI is working with venture investors and suppliers from all over Asia, and through our partnership with Novus International, we are starting to see sales of our products increase in many parts of the world.

What we have learned is that success in entrepreneurial businesses, like emerging markets, requires experimentation and risk-taking, while success as mature businesses, like mature markets, rely more on process and efficiency. For business to succeed in global markets, they will have to master both sets of skills and capabilities. Indeed, doing business in this flattened world can be as much of a rollercoaster ride as it is an education.

Are you ready for the ride?